Records of Brunhes/Matuyama geomagnetic polarity transition and its precursor from Ocean Drilling Program Site 768, Sulu Sea

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Sediments at Ocean Drilling Program Site 768 comprises of foraminifer-nannofossil marls deposited at high sedimentation rates ranging from 4.5 to 10.5 cm/kyr during Pleistocene. U-channel samples with a cross section of 1cmx1cm and 10cm length were taken from Sections 9H3 and 9H4, which corresponds to Brunhes/Matuyama polarity transition and its precursor 15kyr prior to the transition. Paleomagnetic measurements were conducted on u-channel samples with a pass-through cryogenic magnetometer at Tokyo University at 5mm intervals. The transitional VGP paths cover the longitudes of north and south Americas, which support the idea of coupling at the core mantle boundary (CMB) on transitional geomagnetic field.

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